

BELIZE. 1981

N. costalis

1a. *Nasutitermes* sp. Im 3, ♀

From log being used as
firewood - June 7, 1981

Blue Hole, Belize coll. Tena
(Maya)

1B. *Termitophile* from 1A. Im

spec. pres.

2. *Amitermes* sp. 4, ♀ - dead
branch near bldg. Blue Hole,
Belize June 6, 1981

3. *Nasutitermes* sp. Dead down
branch, no trail to building
Blue Hole, Belize June 7, 1981
TSV + monomers *N. nigriceps*

4. *Amitermes* sp. Im, 4, ♀
June 6, 1981 dead branch @
Blue Hole - Belize

183

37

46

May 5

Monoculture sp.

5. *Heterotermes* sp. 4 + ♀

June 6, 1981 - Down dead

branch near building Blue Hole,

Selins (destroyed, practiced
was dissections on)

6. *Heterotermes* sp. June 8, 1981

Stump, heavily eaten, in ground -

Blue Hole, Selins 4, ♀

June 7

7. Combat 1: Large ant
~~was~~ running on a trail -

~~Heterotermes~~ added, trail
disrupted, ♂ ♀ + 4 attacked

and drove off ants

Microaerotermes

Combat 2 - Red army ant vs

Heterotermes sp - ants were driven

from trail, Termites attacked and
repelled them. ants showed signs

by ~~being~~ distress after termite
contact.

Combat 3 - Red army ant
no Nasutitermes sp. - Termites

repelled ants effectively June 8

7. Beale Road - 1 mi.

from junction Lubbock

La.

June 8 Nasutitermes sp.

8. Scenic Colony - Fever Pond

beside road to Blue Hole

4 mi. north of Blue Hole

2007 to present

June 8

9. Dead branch on ground beside

road in second-growth bordering

Columbia Rd. ca 5 mi. from

Blue Hole

(mso)

June 8

10. Staphylinids eating stray

termites at site of

nest picking - Nasutitermes sp.

11 June 8 - Beside road, Second
Growth, near store, 6 mi. from
Blue Hole, Belize. 3, ♀

~~90 20 30 40 50 60 70 80 90~~

12. June 8 - Beside Road - carton
nest on palm tree, ca 1 1/2 ft
above ground - ca 6 mi. from
Blue Hole Station, cleared area,
beside road - Second-growth
forest *Nasutitermes sphaeroides*
100 4 in Hepare

June 9
Combat c Monacis (3) sp.

Got good pictures of -

Ants captured termites; showed temper-
distress after being fired on, but
went on to clear, then attack
more termites

Nest material with termites
in it placed in midst of
Cantal at 10:55 AM. After

1 hr: Termite removed

nest material and

all found

all found

13. Termite nest - from

large brown log quercus

from today, blue hole

June 9

14. To nest, in Cuz

Dead branch on ground, same

as #13, further up - Mary Anne

Early - June 9, 1981 - as in 13

^{Microcratus} sp.
15. ~~Heterotermus~~ sp. from
standing sheep - up trail
from Blue Hole Lodge Lathrop
June 9.

16. Microcratus sp.
like getopis in look
& smell, also behavior.
Tampa, Fla - Dead 3/11/11.
standing, HARD 9/1/11

Combat Monacis

Block of wood contains
ca 30 nasutitermes sp. workers
& soldiers placed in path
of foraging Monacis.

Ants were instantly repelled
creeled around termites,
termite soldiers fired on

any ant that approached,
group still intact after

30 min. Parties separated
ant leaving word, later
returned. 2/ slow, but

repelled ants approached

1 ♀ caught at beginning

1 ♀ " @ 45 min.

Terminated @ 1 hr. - Surv

was returned to culture

& sprayed ants isolated to plastic cups
(care)

Amitermes sp. 4, ♀

17. Down wood near lodge @ Blue Hole,

Beliz - 10 June 1981 - MSC.

(70) 20 30 40 50

18. Neotermes sp. large

colony in rotten log on trail

to falls, Blue Hole, Belize

10 June 1981 - MSC

100 to Weyani

16 - Continued:

24 hrs. later - Survivors
= 3 living, 1 dead,
2 escaped

Combat, #15 - 12:30 PM

June 10
ca. 200

Termite from colony placed
in Monroe's trail @ 12:30

Ants seized worker immediately
also soldier

Nearly all termites captured
and carried off by ant
within 30 minutes

19 *Cryptorhina* sp. under
bark, dead tree - Hole. Warren
Stemmer - June 10, 1981
Blue Hole, Belize

20. *Anopheles* sp. 1st inst.
Blue Creek in Lodge
- under leaves

21. 1st inst. entrance of
Cottontail Forest

Soldiers lined
for queen

N. ephratae

22 - Same as long as 21?

about 10 ft further down trail
in dead leaves - placed in tray
as bait for predators

Predators measured 5 24, ♀

Woods Ant from
dead trees inhabited
by ~~the~~ White-crowned Plover
Schizothorax paraguayensis -
bung = Jun.

3 nests in area, all
in trees inhabited by
and protected by these
ants. Very incise!

milong:
23. June 11, 1981 Forest Service
Station near Salamanca - get locat.

Small carton nest on side of orange
tree in cleared area.

200 to Hepans ; 24, ♀ vouchers

Camp: 100 ♀, 100 ♂ in feeding
hall of Monaci.

15 men on established quarry
site -

24 June 11 - Forest Service Sta.

Carton nest on Hwy. 200 3/4
to Luperon; ant predators
observed -

Combat: "Monkeys" individuals

momentarily repulsed by 2

fire but soon recover and

attack grouped or isolated

workers. Carrying off large

numbers to nest.

25. Long complete carton nest

lying on ground behind

Ochana, Forest Service Sta.

Belize - June 11 - 200 to Luperon

ants ate these &
spread & despatch
N, 2, ♀, Guests pres.

26. *Armitermes* sp. Warren Feiner
Columbia ward, Feiner
June 11, 1981

27. *Cryptotermes* sp. Dyer
Log m. building, Blue
Creek. June 12, 1981
Beetle show Warren

28. *Nasutitermes* sp. Carter
nest on tree, low ground near
beach, Belmar Beach Hotel - June 15
100+ 2 / Im., 2, ♀

29. Nasutitermes ~~sp~~
Dangriga - on tree near
Pelican Beach Hotel - carton
nest. 100⁺ y / Im., 21, ♀

South Huray, 45 mi. So. of Dangriga

30. Lunch Stop, Rd. to Blue Creek

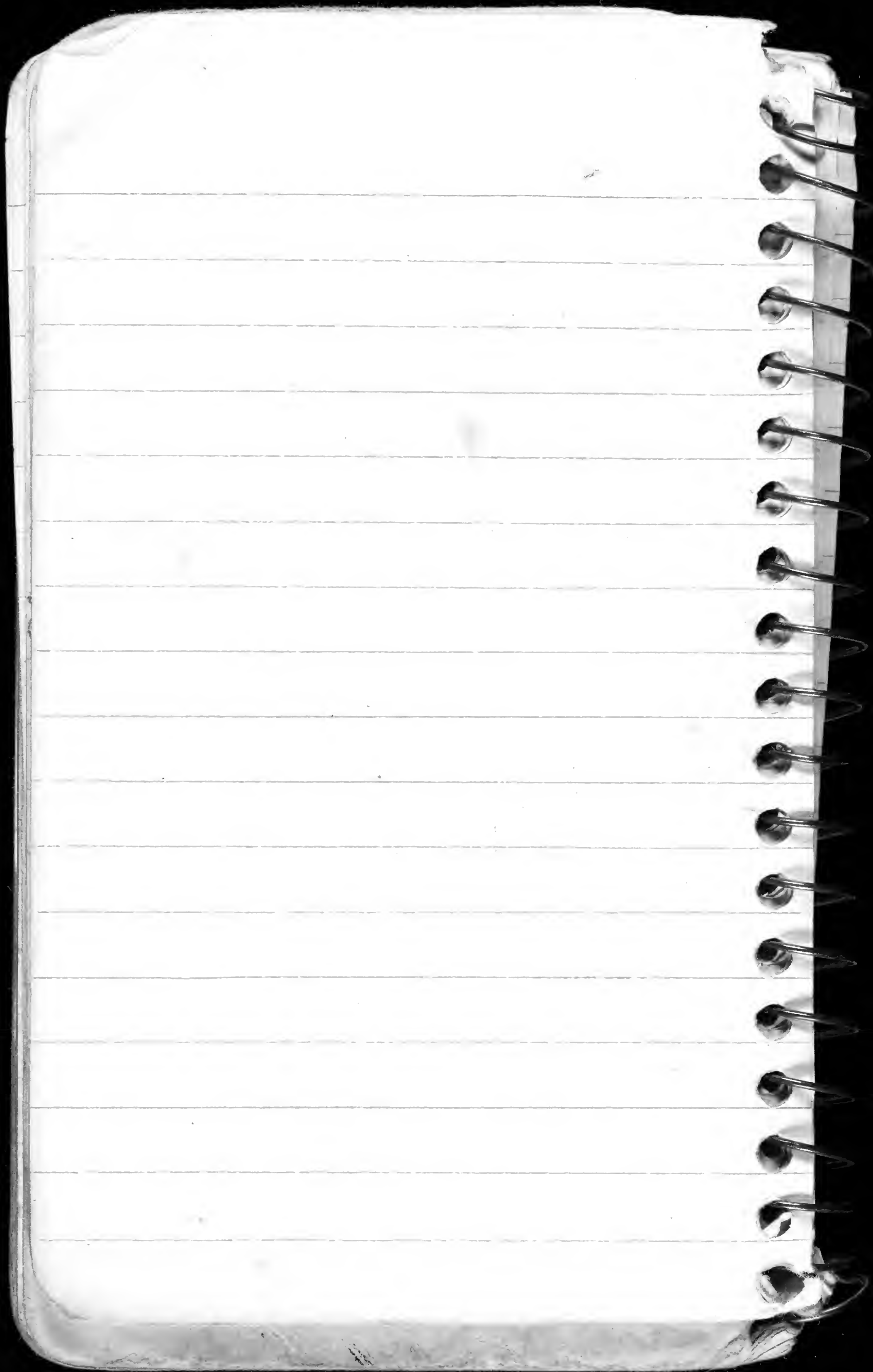
Sandy Pine Scrub near saw mill
site - June 15, 1981 - under large
log -

31 - same as 30 - Amitermus sp.

32. Heterotermes sp.
more inv., dead branch

33 - Same data as 32

34. Amitermus sp. from
cow chip - same spot



35. Coprototermes sp.
in partly buried pine
log - old colony in carbon
earth mass inside -
same site, lunch stop.

Blue Creek again - June 17,
1981

37. Armitermes sp. June 17, 1981
Rotten log in shelter MSC.
4, ♀

38. In rotten log, same area
as # 37 - 121

Hesperotermes sp.
39- Rotten log further up
trail - with Amblypygid -

40. *Nasutitermes* sp.

Carton nest on side of big
tree near latrine - @ Blue Creek

8/2. - Nest with thin outer
envelope, primer inner cells
100% for glenn

41 *Ornitermes*

Dead long for 100% glenn

42. *Kalotermitid* -

Hard standing stump
near shelter, same

day In, 2, N

Colony to Larva

43. *Ornitermes* sp. ^{2/4} ♂

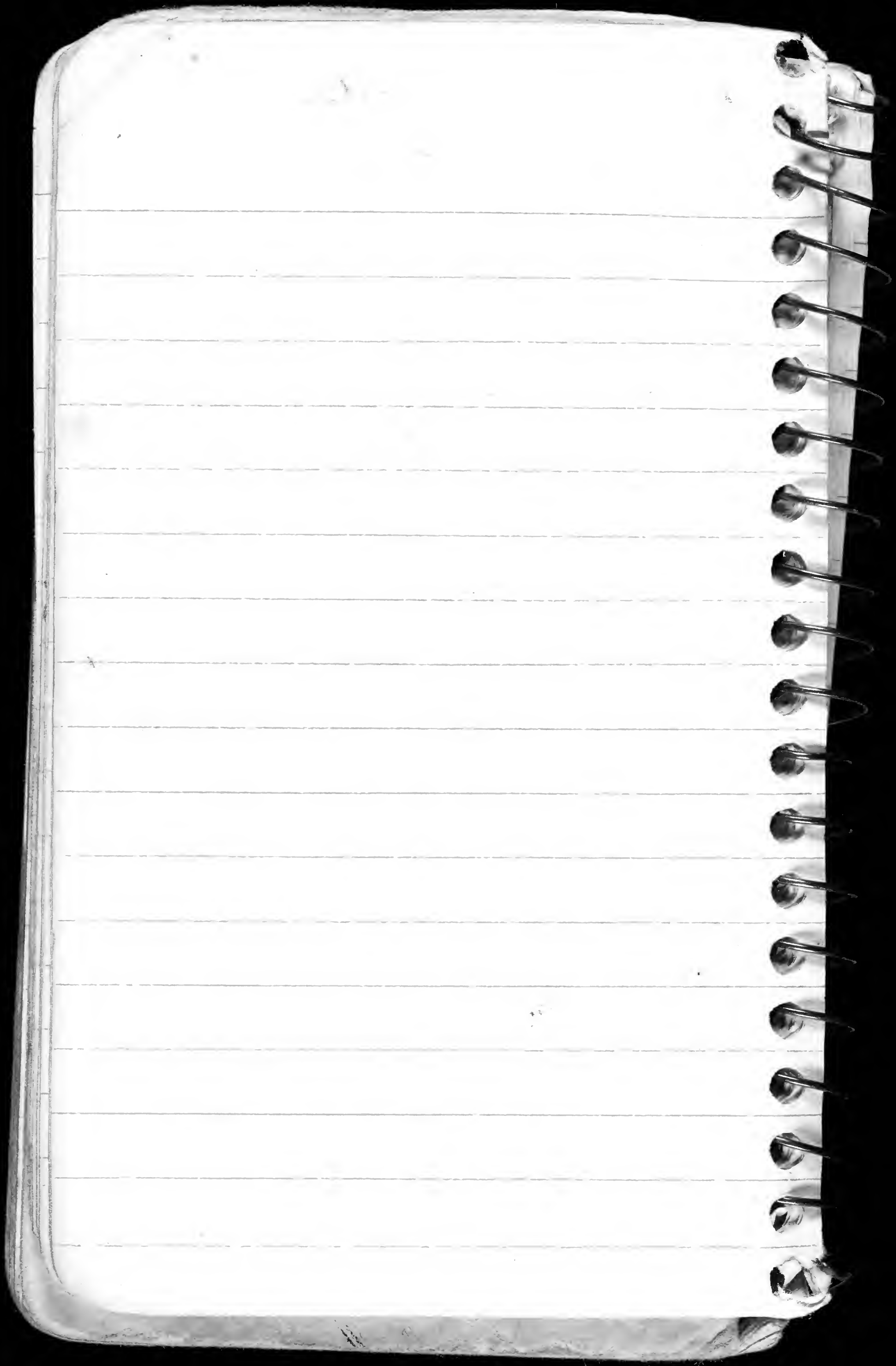
Ants, life cycle

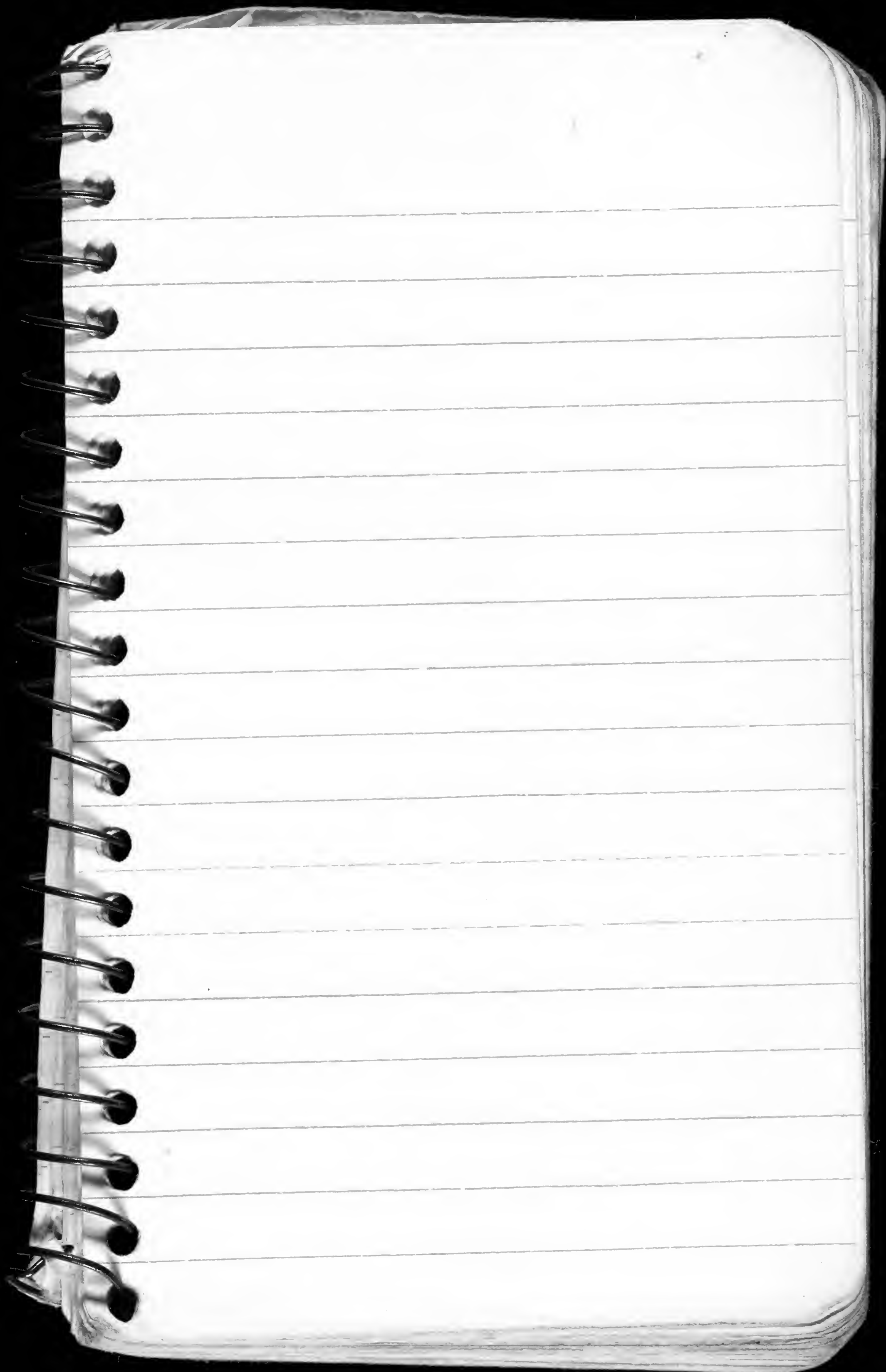
44. Large Ammitum from
log & octopile

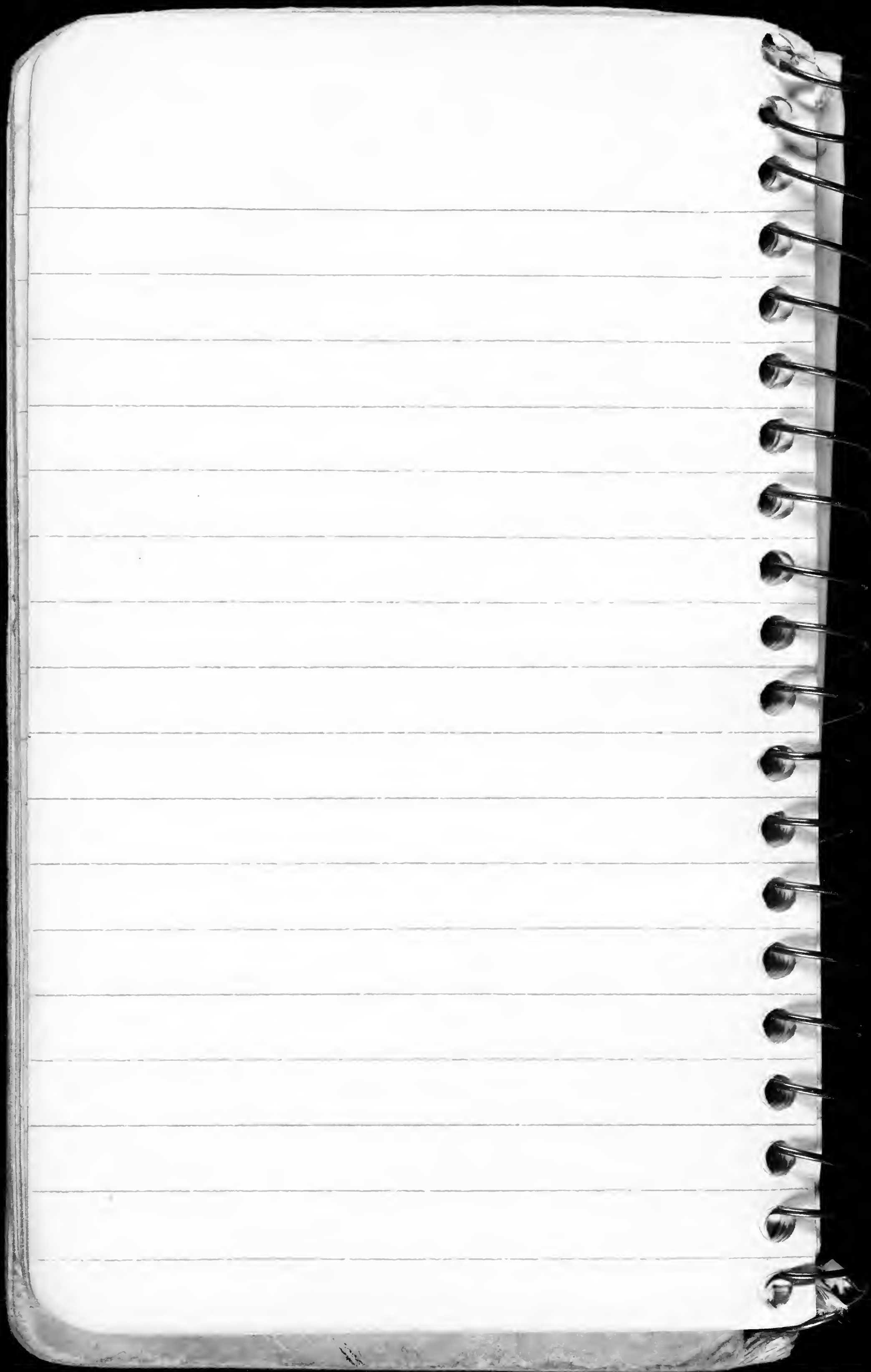
45. N. octopile (?). from
large dead log near
Malaise trap, 1/2 mi. from
shelter - - Live colony from
slide June 17 above
N. glabriferus

46. Ammitum sp. June 18, 1968
down branch near Blue Creek,
1/4 mi. upriver from shelter
nse. 2, ♀







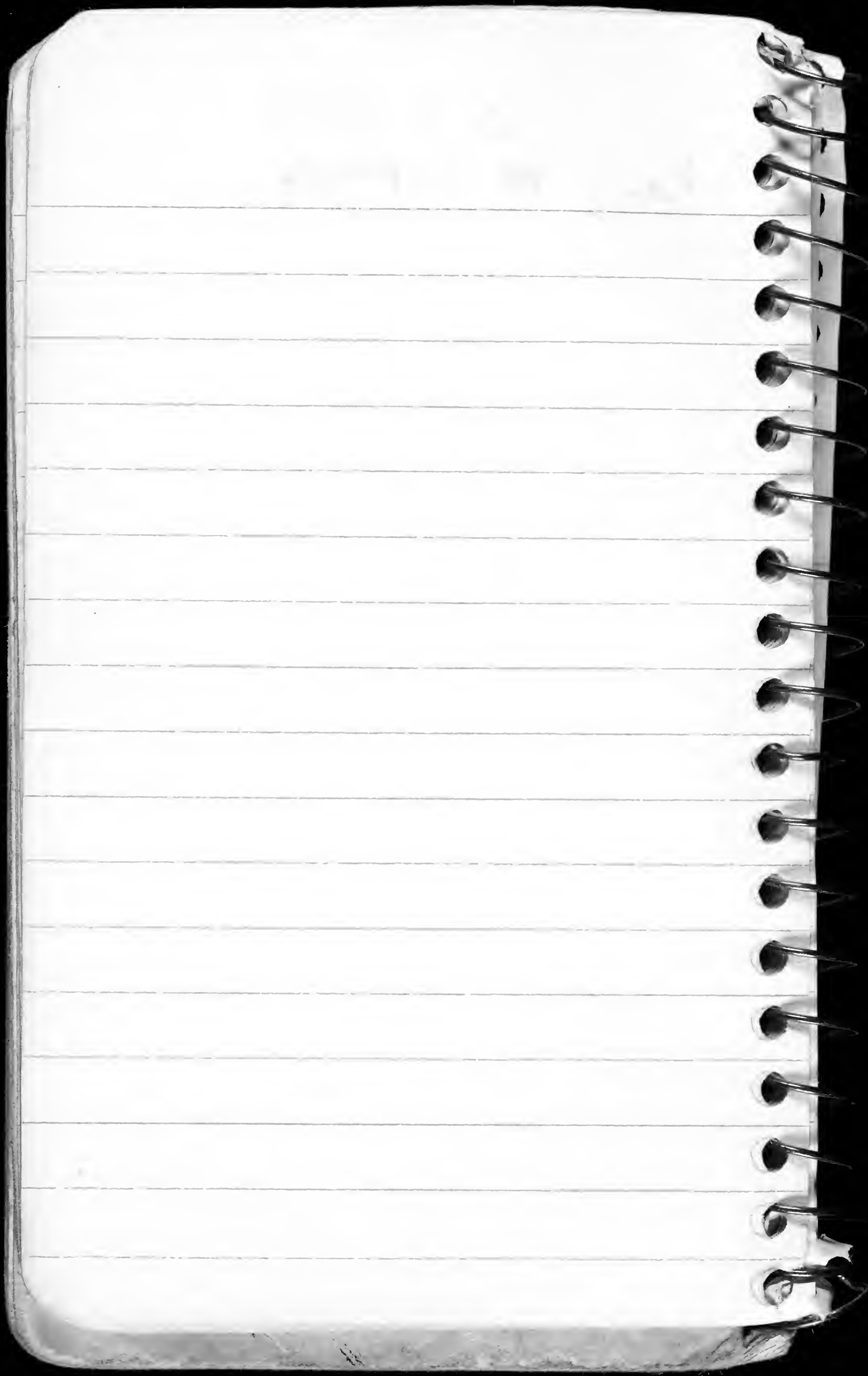


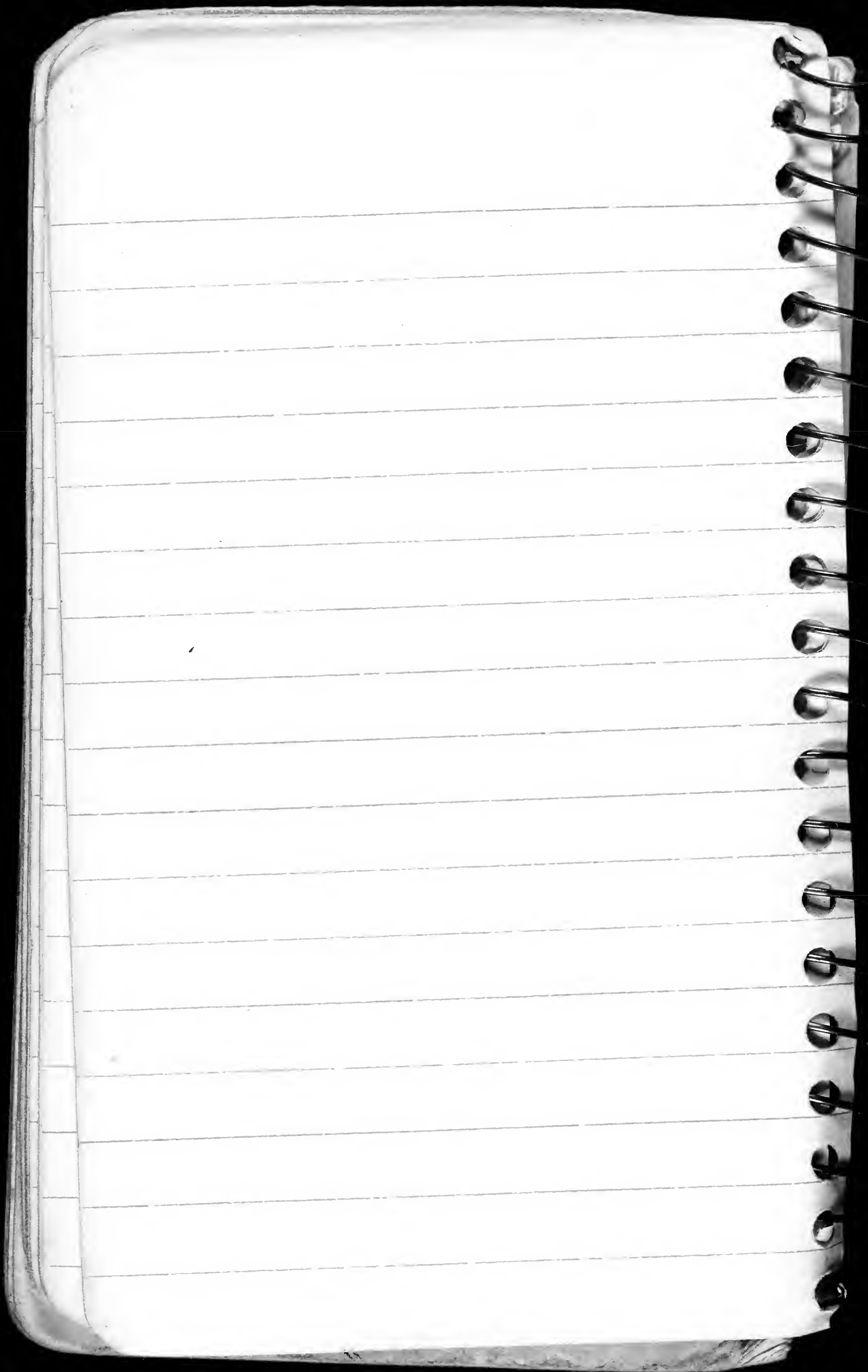
357-1989

Kan

~~35~~

~~1989~~





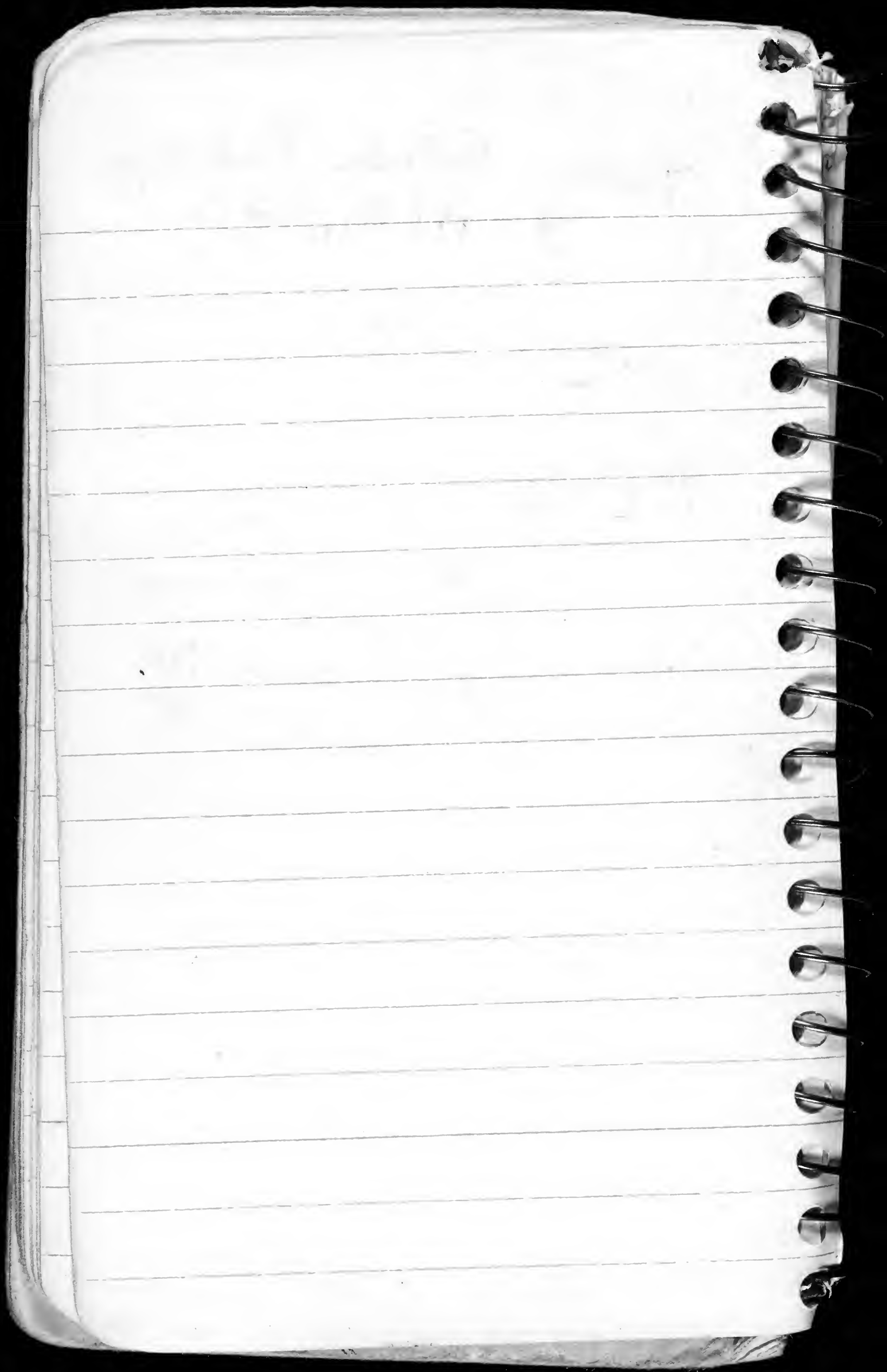


~~Bobby~~ Roberta Rubinsoff
- 282. 3271

W Dave - 382 - 8982

HEM-770-5700

Invent. Seminar
12:00 out @ 1:15
2nd floor *



615 guyanensis

800-221-2338

American Airline

661-4242

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Travel Agent (Arthur)

595-1567

ask for Douglas

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VISA

100 lb / person

VARIG

615 Texas

Int. Animal
Bldg.

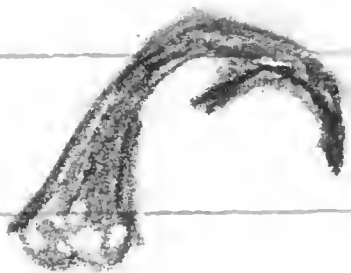
WA, 1010

Check in 8:00 AM
bus

For July 15
6:00 PM
Cher 4:00 P

All pelagic specimens, both above
Amikins sp. / 1 spec

30 leafy mud. 1.72 mm.



#43 - as above

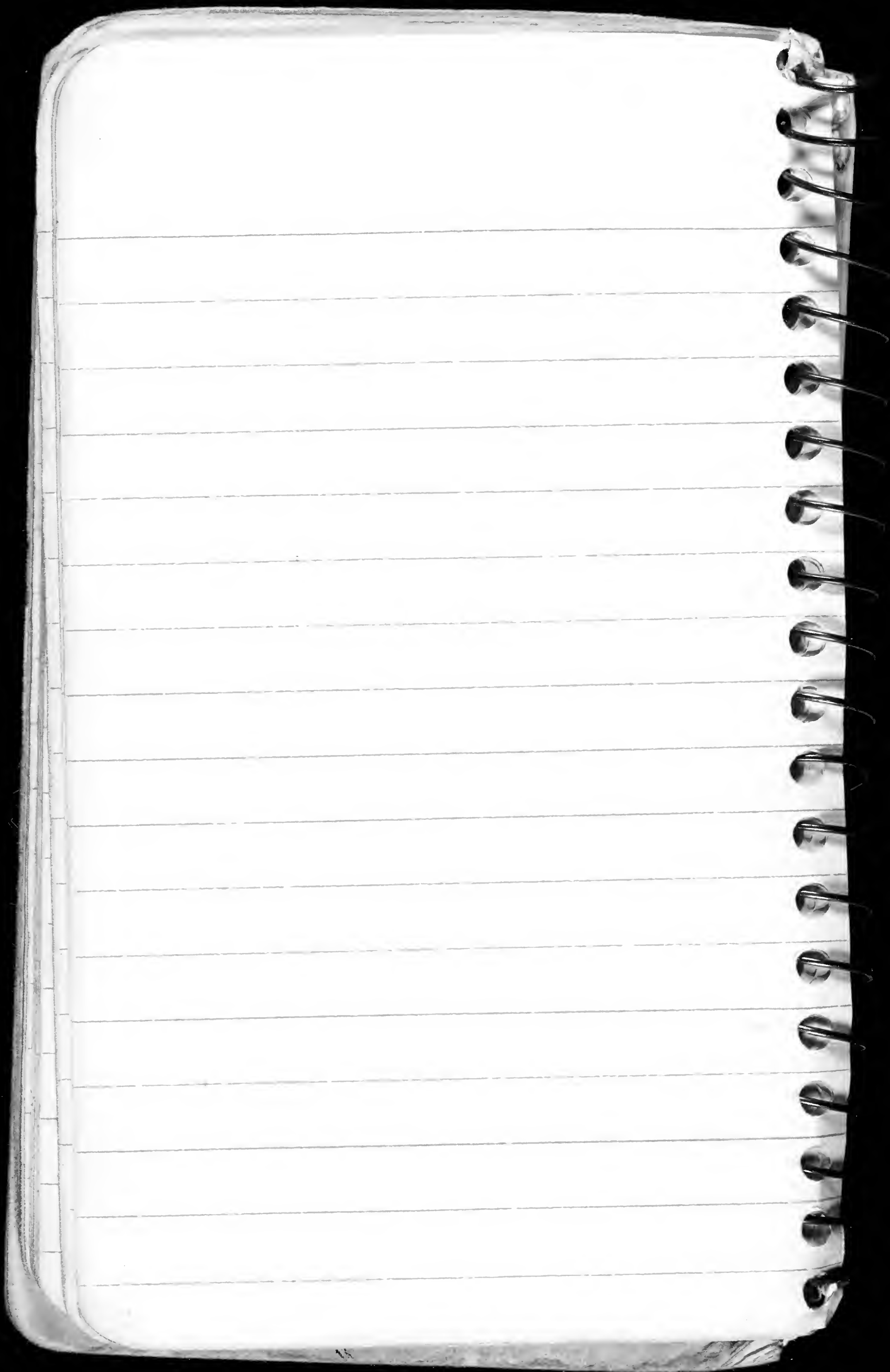
#14 - as above
plus 1 odd result

#2 - above

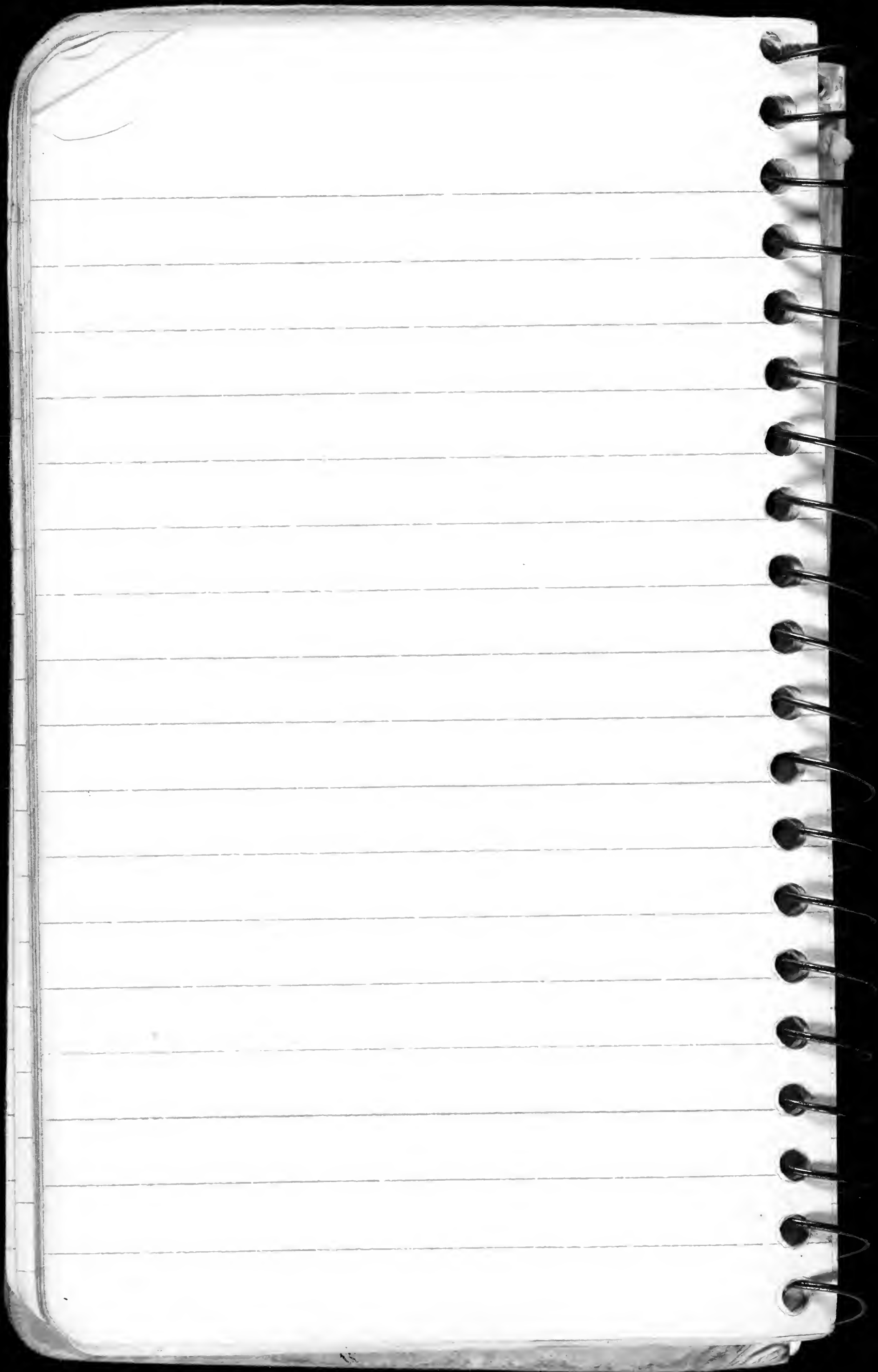
31-11

#46 -

Q. Pacific
: example
Cyrtophrum
Reedman







2 wks

89.95

Susan & Dave

on visa

Harvest Savers - ~~Wk~~

1-800-848-2649

1 visa #

4332-0001-0509-

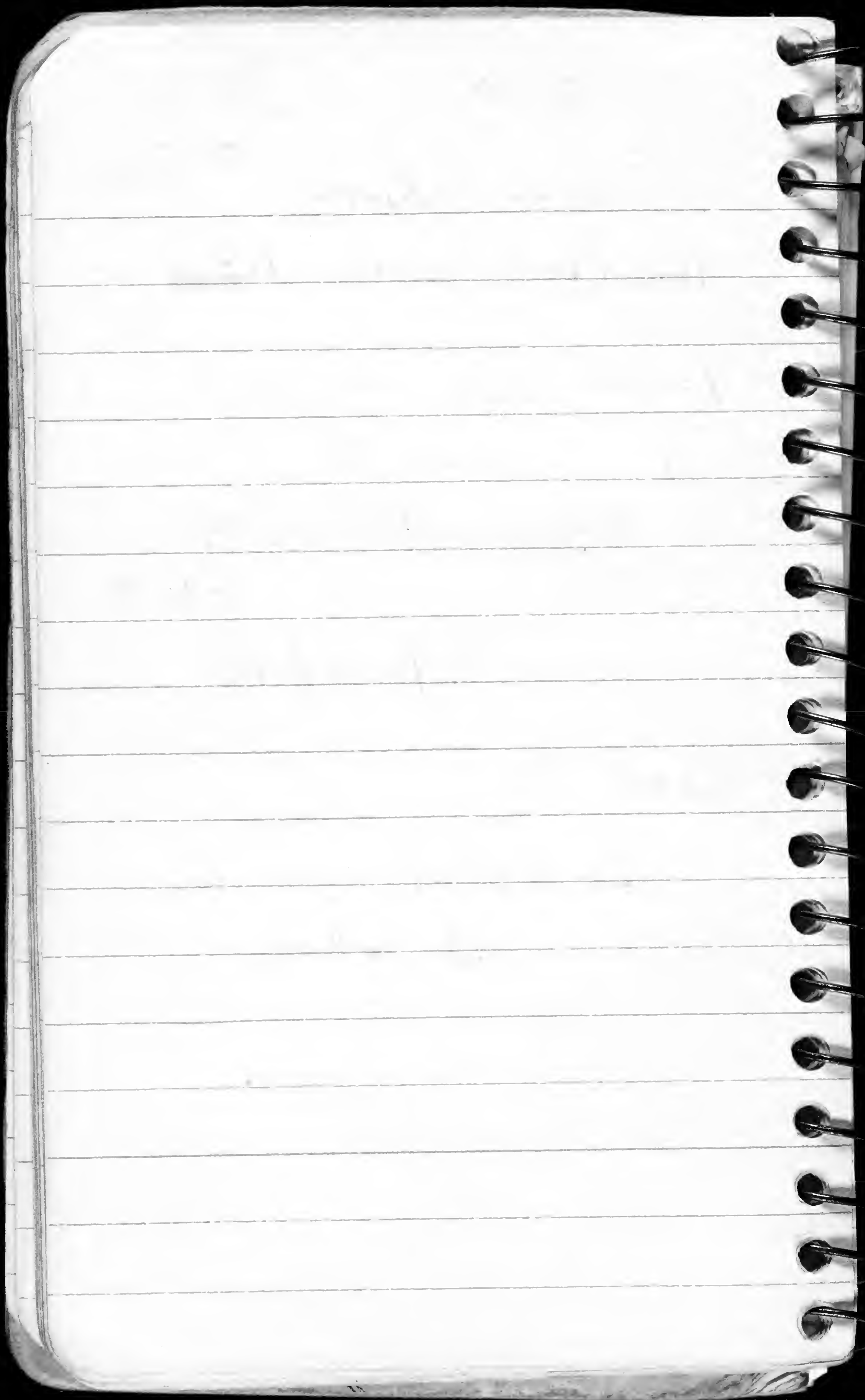
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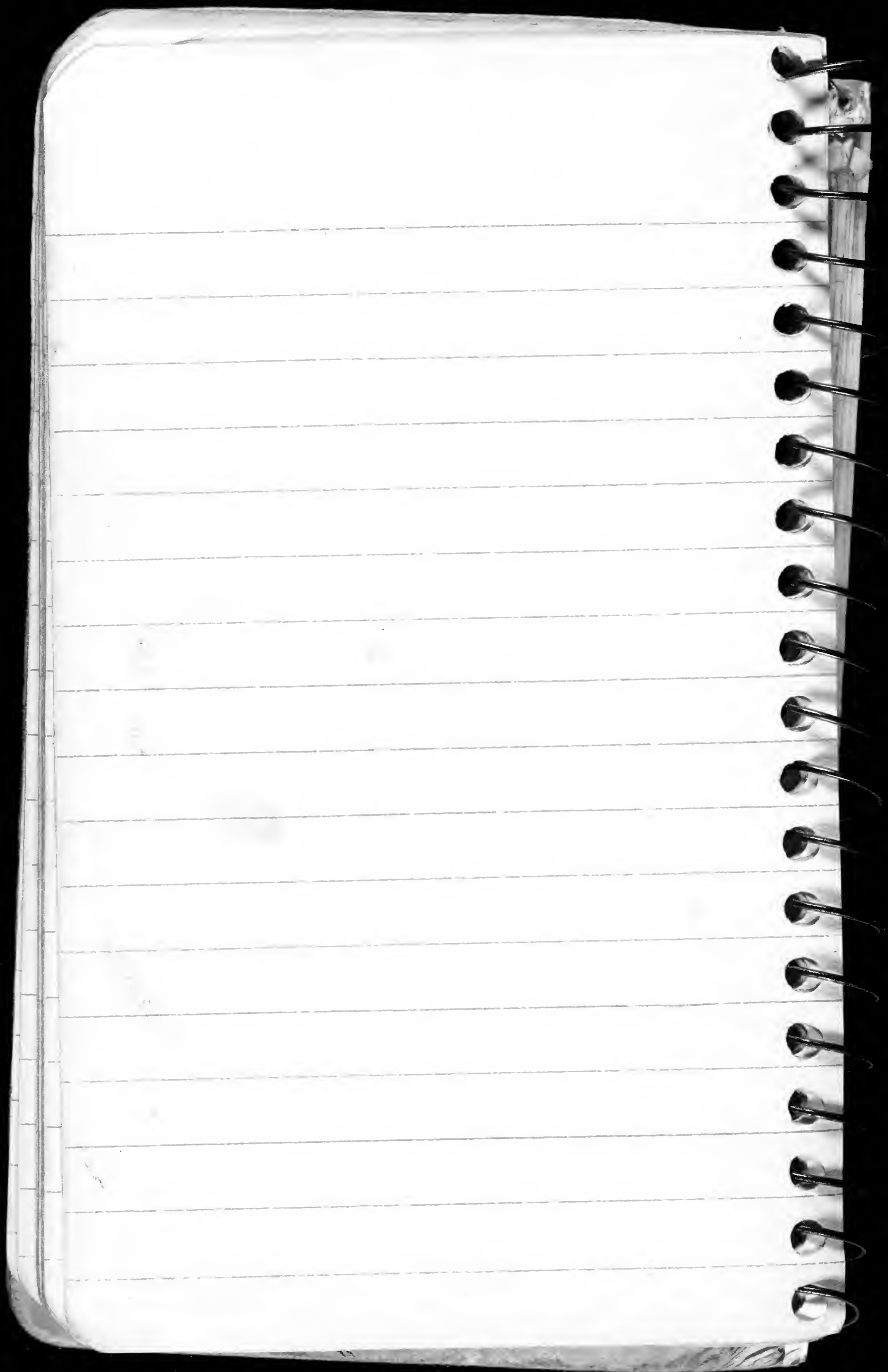
Exp 1/90

Send To:

To arrive in ca

2 weeks





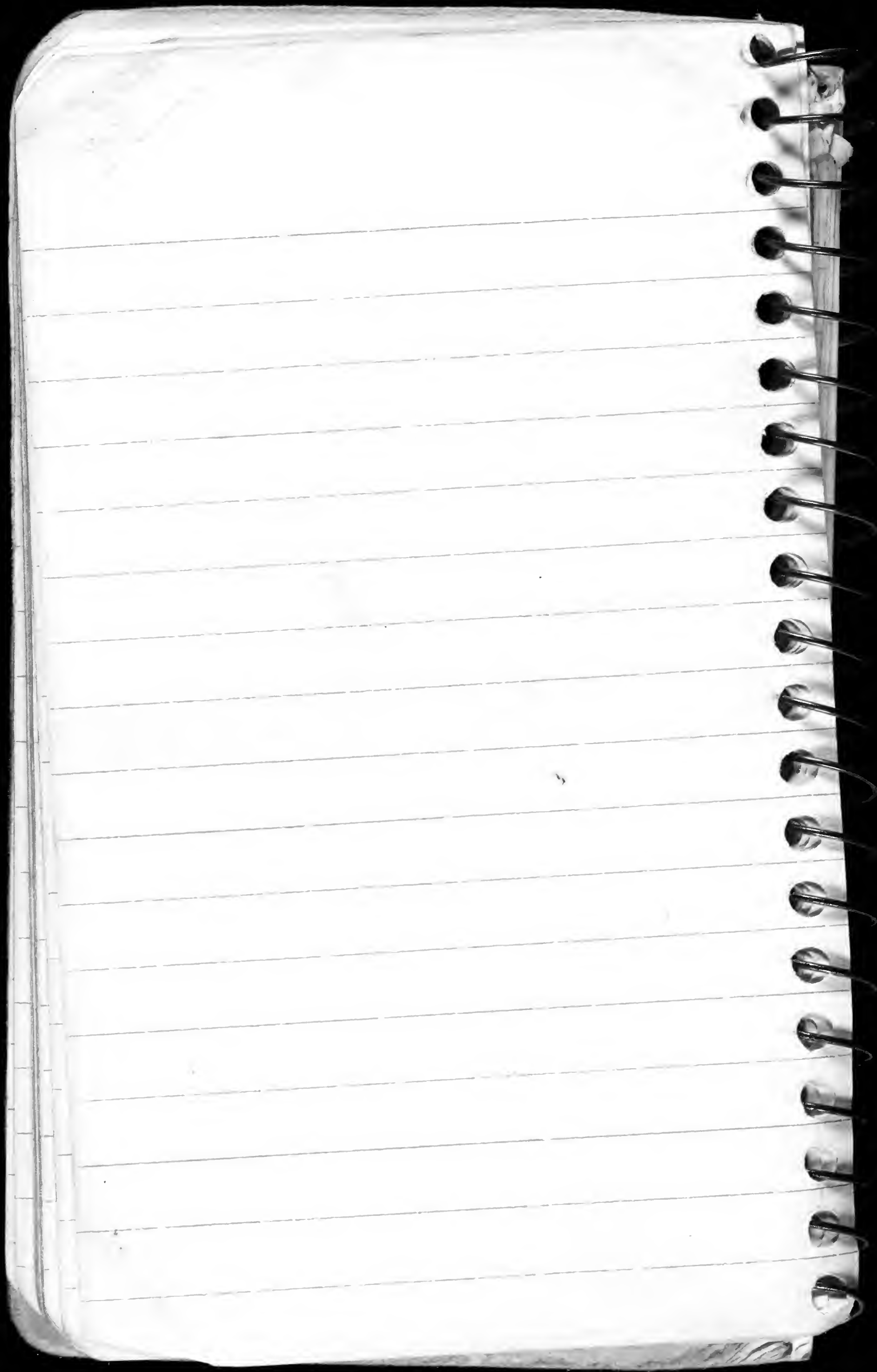
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3333

Armitermes albidus

Macracanthorhynchus hirudinaceus

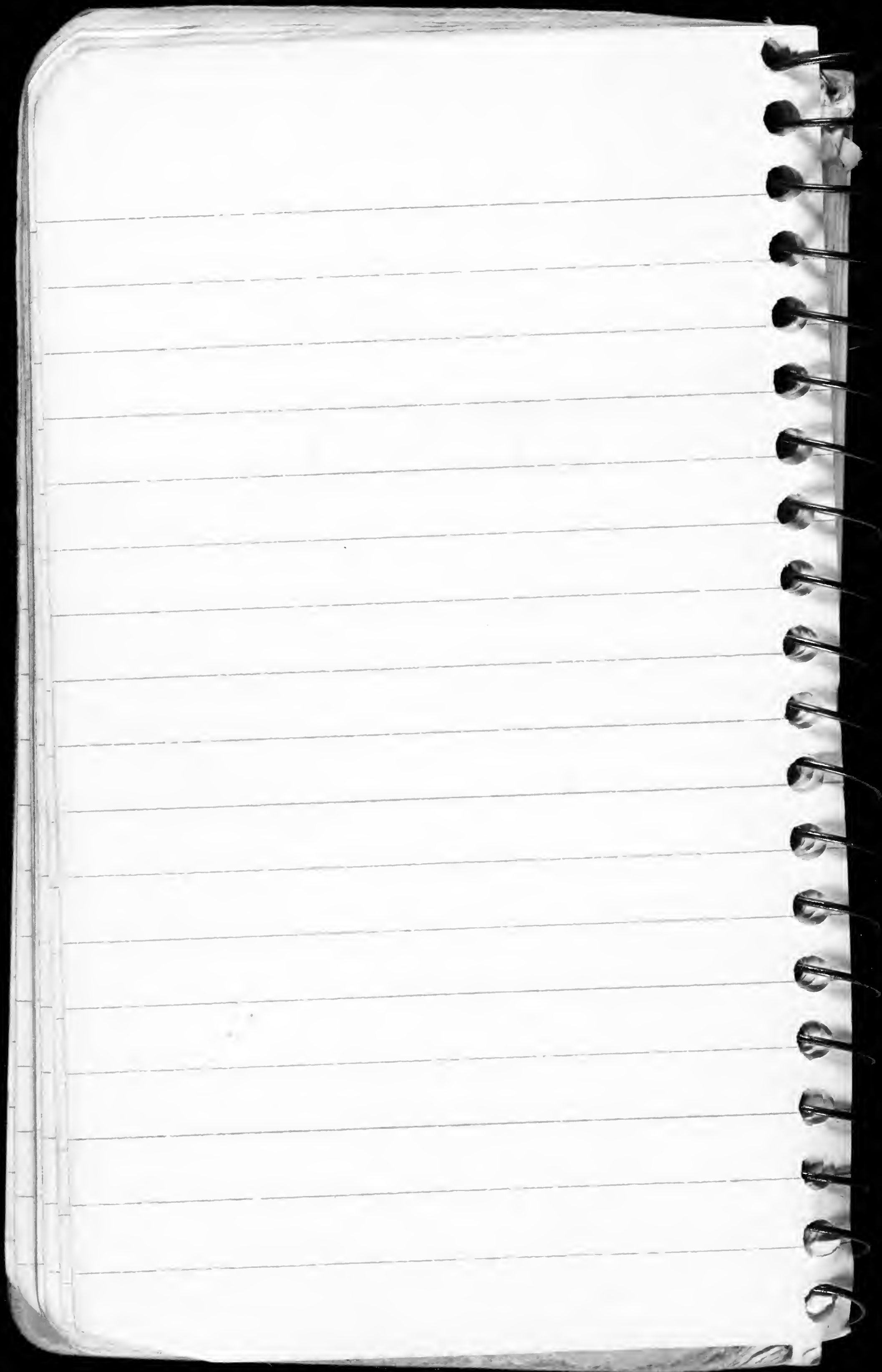
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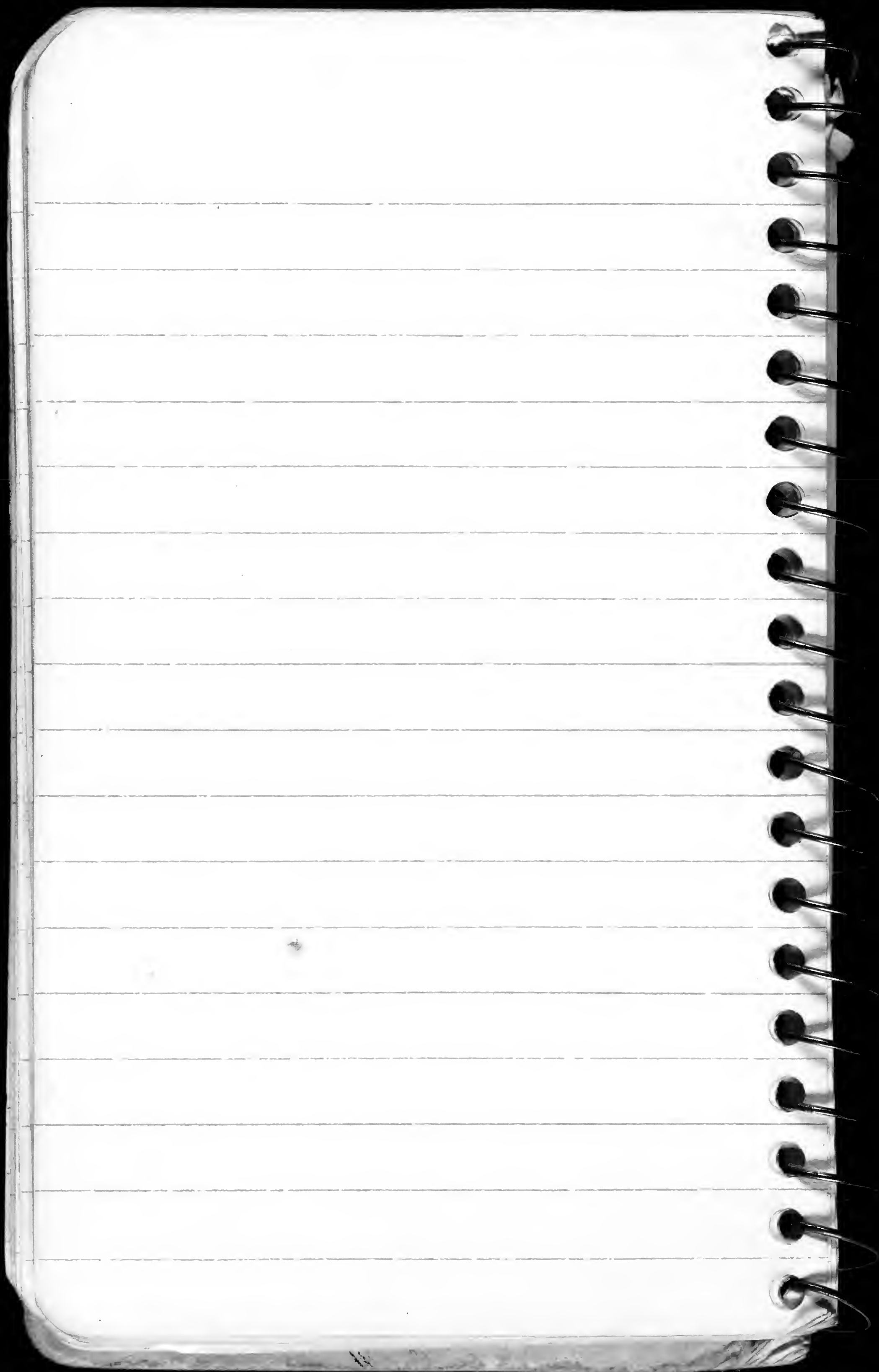


John B

333-6684

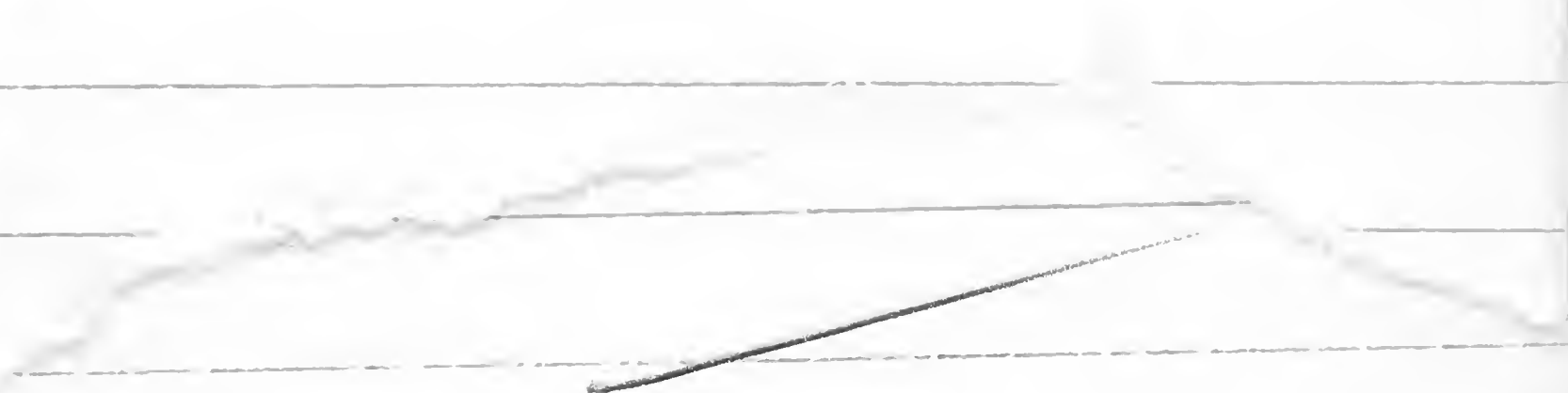






12 FEB 1978

1981



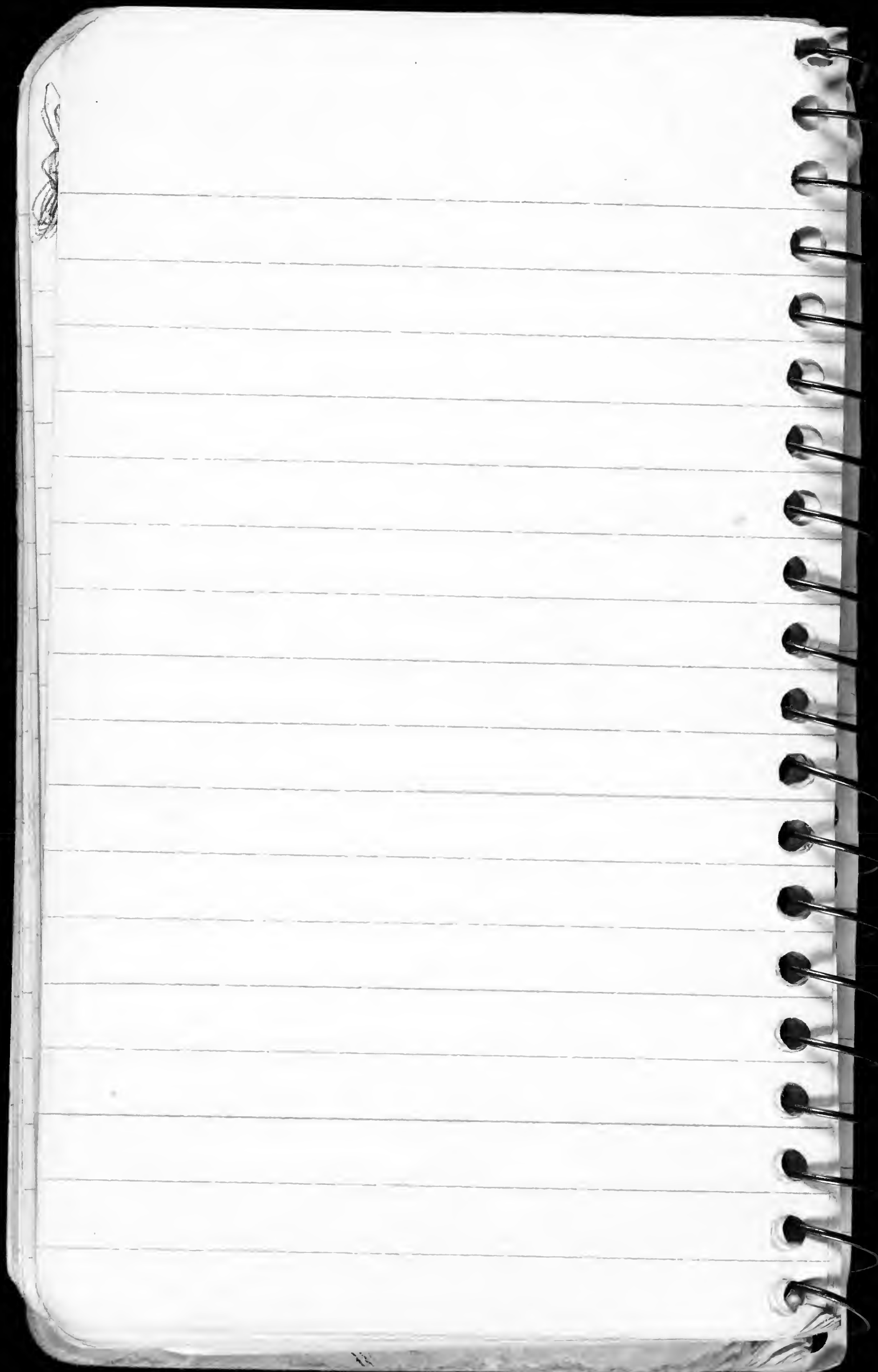


BELIZE 1981
Bill Oberm

Harvey & Marisa
mudd

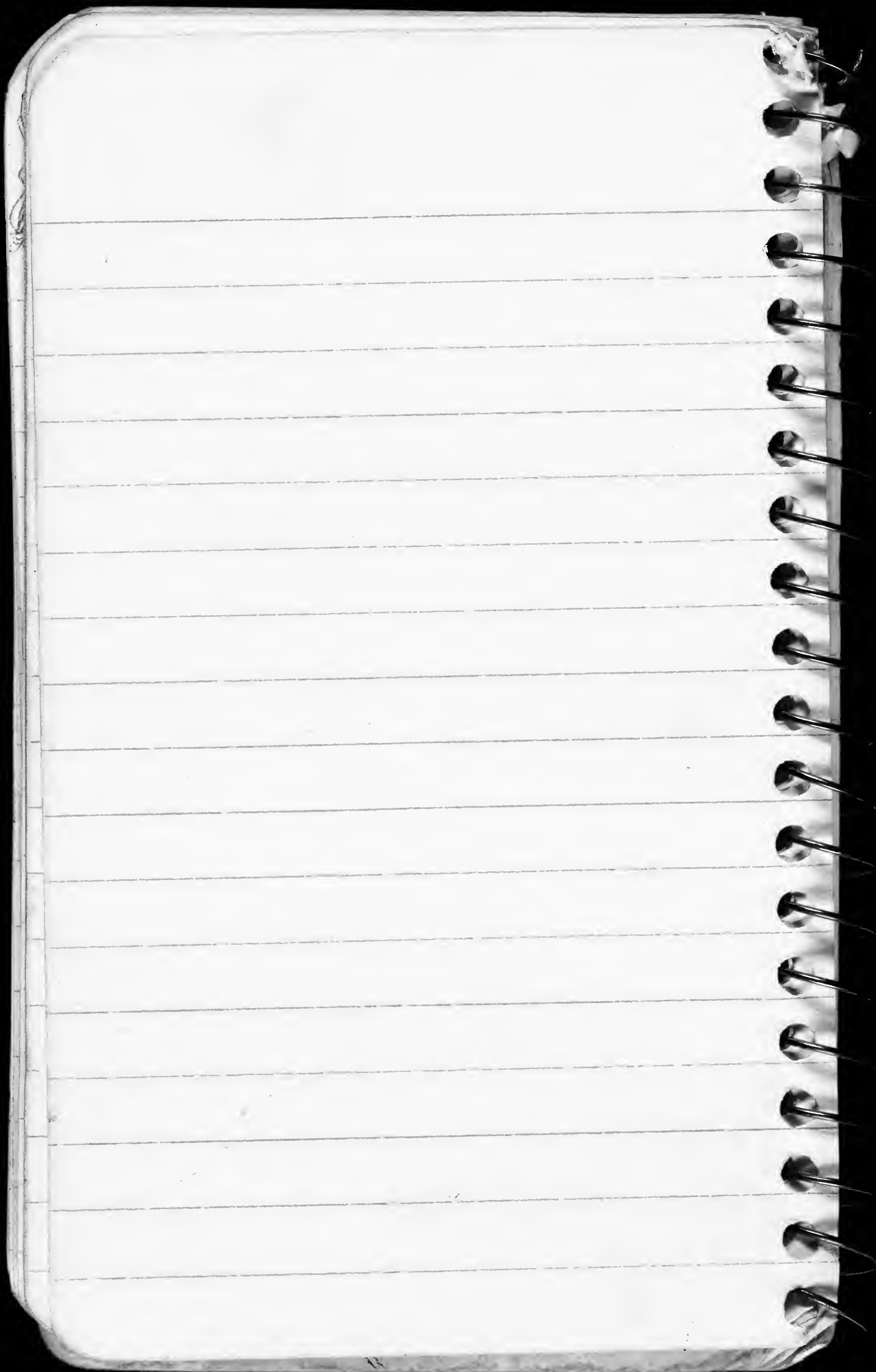
April 3

Dinner with
the mudds & Bill



1 BELIZE

1981



REFILE 1981

Call

Kathy Abbott

617-9268200

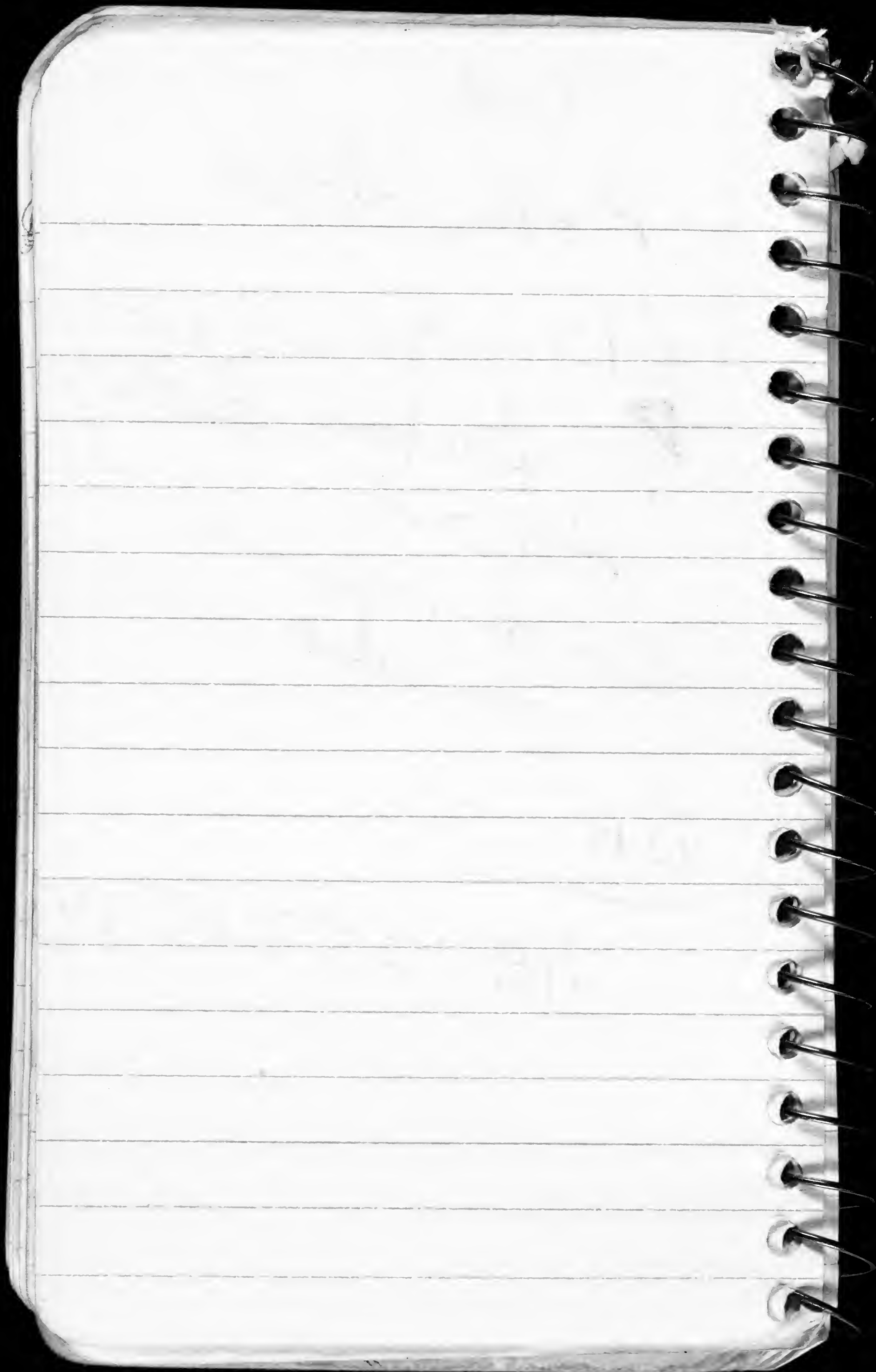
Re Barbara Bentley's

Proposal

in a reference -
no cabinet review

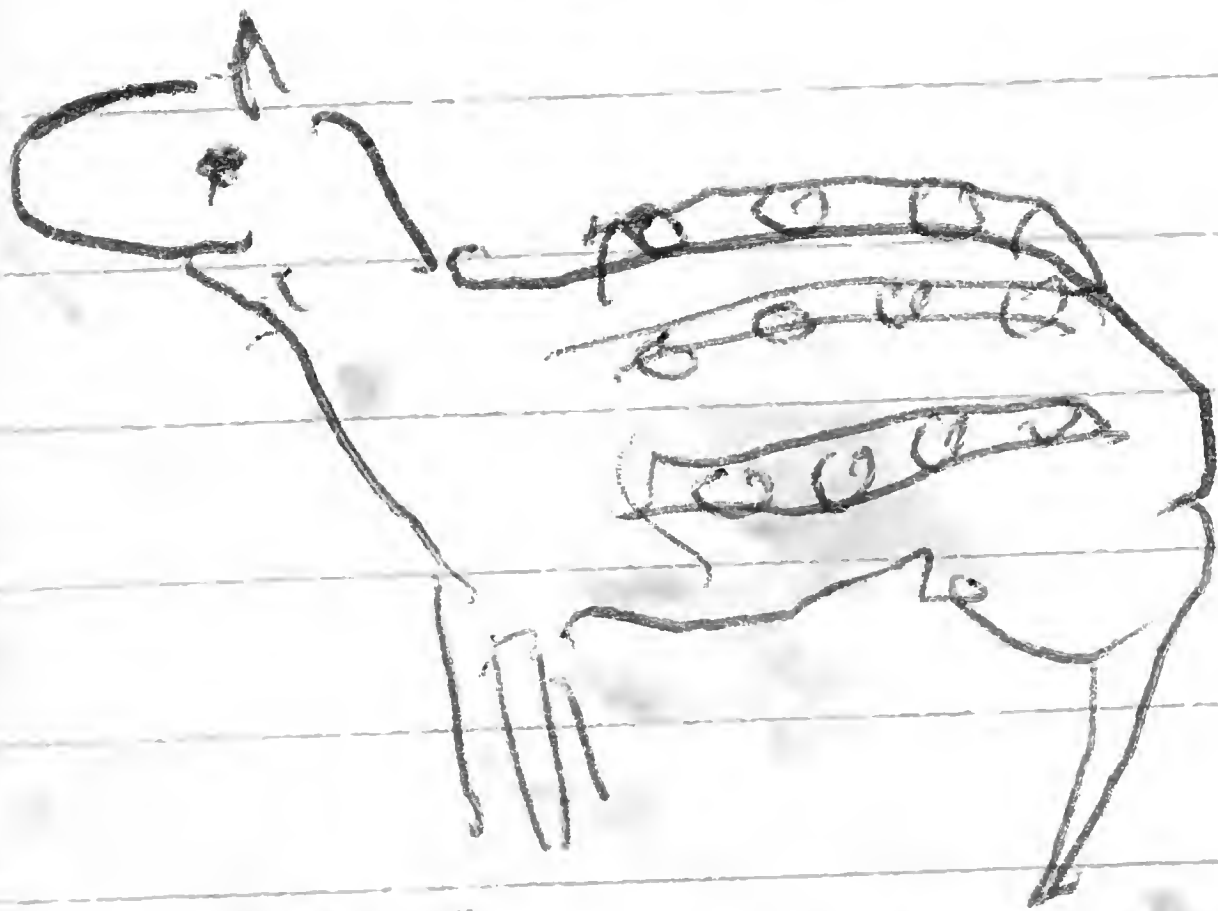
BB³

718-2537574



BELIZE 1981

Top of one second bus → Tzac
Thomas ~~See~~
past Salamanco - To
Caniado Cho Right



giunot
Paca
Labban

Margaret Collins

1 BELIZE 1981

penworthy®

NOTEBOOK



80 SHEETS 5-IN. x 3-IN.

NO. 11307

OLD No. W-783



**BRADNER CENTRAL CO.
CHICAGO, ILLINOIS 60606**

FIELD NOTES : BELIZE

Collected by M.S. Collins unless otherwise indicated

- 1a. Nasutitermes sp. Im. S W from log being used as firewood; June 7, 1981
Blue Creek, Belize . Coll. Tina.
- 1b. Termitophiles from 1a : in special preservative (Warren Steiner) *(Barker's Soln.)*
changed to ETOH March 10, 1982
2. Amitermes sp., S,W ; dead branch near building, Blue Creek, June 6, 1981
3. Nasutitermes sp. from dead down branch near building, Blue Creek, June 7.
4. Amitermes sp. Im., S, W. June 6, 1981- Down branch at Blue Creek, Belize
5. Heterotermes sp. S.W.; June 6, 1981- from dead down branch near building,
Blue Creek
6. Heterotermes sp. June 7, 1981 ; From heavily-eaten stump in ground, Blue Creek;
S,W.
7. Combat 1 : Large ant running on trail ; Heterotermes added, trail disrupted, worker
and soldier termites attacked and drove off ants
8. Combat 2 - Red army ant vs Heterotermes sp.; ants were diverted from trail,
termites attacked and repelled them; ants showed signs of distress after
termite contact
9. Combat 3 - Red army ant vs Nasutitermes sp.; termites repelled ants effectively;
June 8, 1981
7. Berds Road, 0.7 mi. from junction with Lubantin Rd., Belize June 8
8. Seive colony, Fence post beside road to Blue Creek, 4 mi. north of Blue Creek ;
200 soldiers to hexane ; Nasutitermes sp. ; June 8.
9. ; from dead branch on ground beside road in second-growth
bordering Columbia Road, ca 5 mi. from Blue Creek
10. Staphylinidae eating stray termites at site of nest picking, Nasutitermes sp.,
June 9
11. Nasutitermes sp. , beside road, second growth, near store, 6 mi. from
Blue Creek ; S,W. June 8 ; *1 staphylinid in collection*
12. June 8 - Beside road, carton nest on palm tree ca 1½ ft. above ground ; ca 6 mi.
from Blue Creek, cleared area beside road, second-growth forest; 100 s in
hexane
- Combat with Monacis (?) sp. , photographed at length : Ants captured termites;
showed temporary distress after being fired upon, but went on to clean, then
attack more termites. Nest material with termites in it placed in midst of
combat at 10:55 AM. After 1 hour : Termites numerous in nest material and in
an orderly train to under surface of log - June 9
13. Armitermes sp. from large down log going uphill from lodge, Blue Creek, June 9.
14. June 9 - Log on ground, as in #13 but further up trail ; coll. Marianne
Early ;
15. Heterotermes sp, from a standing dead stump up trail from Blue Creek lodge
latrine ; June 9, 1981
16. Nasutitermes sp. - looks like N. octopilis, smells like it, acts like it;
June 9 ; dead, down HARD stump; S,W.
- Combat with Monacis (?); block of wood containing ca 30 Nasutitermes sp. workers
and soldiers placed in path of foraging Monacis; ants were instantly repelled;
circled around termites; termite soldiers fired on any ant that approached;
group still intact after 30 minutes. Parties separated out leaving wood, later
returned. Soldiers slow, but repelled ants effectively. 1 worker captured at
beginning of engagement ; another worker captured at 45 minutes combat time.
Observations terminated at 60 minutes. Surviving termites returned to culture ;
6 sprayed ants isolated to plastic cups. At 24 hours, 3 were alive ; 1 was
dead ; and 2 had escaped.
17. Amitermes sp. S,W. From down, dead wood near lodge at Blue Creek; 10 June,
1981.
18. Nasutitermes sp. large colony in rotten log on trail to falls, Blue Creek;
10 June 1981; 100 to hexane
Combat: 12:30 PM June 10; ca 200 termites from colony placed on Monacis
trail; ants seize workers and soldiers immediately; nearly all carried off
by ants within 30 minutes.